

# MAIA Operational Plan

version: October 13, 1998

Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.1: <i>Condition of the Mid-Atlantic Estuaries Report</i>											
Task	Assessment Framework Levels					GP RA	R e g i o n	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.1.1	✓	✓	–			2, 8	1	5	Finalize <i>Condition of the Mid-Atlantic Estuaries Report</i> using historical monitoring data and 1990-1994 EMAP monitoring data	1998	Lead: EPA/ORD/NHEERL/AED Partners: EPA/Region 3; NOAA; DOI/NPS; Delaware NEP; MD Coastal Bays NEP; CBP; MD DNR; DNREC; VA DEQ; EPA/ORD/NHEERL/GED
1.1.1.2	✓					2, 8	1	1, 4	Address technical issues related to estuary health <ul style="list-style-type: none"> <li>Why system-wide loss of oysters?</li> <li>Why diseased fish/shellfish?</li> </ul>	2000/2001	Lead: EPA/ORD/NHEERL/AED Partners: EPA/ORD/NHEERL/GED
1.1.1.3	✓	✓	–			2, 7	1	1, 4, 5	Update <i>Condition of the Mid-Atlantic Estuaries Report</i> to include 1997-1998 monitoring data	2002	Lead: EPA/ORD/NHEERL/AED Partners: EPA/Region 3; NOAA; DOI/NPS; Delaware NEP; MD Coastal Bays NEP; CBP; MD DNR; DNREC; VA DEQ; EPA/ORD/NHEERL/GED
CBAT Lead: P. Gant/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.2: <i>State of the Mid-Atlantic Streams Report</i>											
Task	Assessment Framework Levels					GP RA	R e g i o n	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.2.1	✓	✓				2, 8	2	1, 5	Develop <i>State of the Mid-Atlantic Highlands (MAHA) Streams Report</i> using 1993-1994 EMAP MAHA Data	1998	Lead: EPA/ORD/NHEERL/WED, Partners: EPA/Region 3
1.1.2.2	✓					2, 8	2	1, 4, 5	Develop <i>Regionalization and Selection of Biological Indicators for Mid-Atlantic Coastal Streams Report</i>	1998	Lead: DNREC Partners: EPA/ORD/CBAT
1.1.2.3	–					2, 7	2	1, 5	Develop Basin-specific reports on Elk, Bush, and Gunpowder Basins	1998	Lead: MD DNR Partners: EPA/ORD/CBAT
1.1.2.4	–					2, 7	2	1, 5	Develop <i>Ecological Assessment of Maryland Streams</i> (REMAP Project)	1999	Lead: MD DNR Partners: EPA/ORD/CBAT
1.1.2.5	✓	✓				2, 7	2	1, 5	Finalize <i>State of the Mid-Atlantic Streams Report</i> <ul style="list-style-type: none"> <li>develop partnerships (liaison with States needed)</li> <li>assess 305b and 303d reports to determine applicability to reporting schemes</li> <li>Analyze existing data, including MBSS, MAHA and Coastal Streams data</li> </ul>	1999-2000	Lead: EPA/ORD/CBAT Partners: EPA/Region 3/WPD; MD DNR; PA DEQ; DNREC; WV DEP; VA DEQ
1.1.2.6	–					2, 8	2	1, 4	Address Technical Issues Related to Stream Health <ul style="list-style-type: none"> <li>habitat restoration</li> <li>better indices</li> <li>relationship to EPT indices</li> </ul>	2001	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region 3/WPD; MD DNR; PA DEQ; DNREC; WV DEP
1.1.2.7	–	–				2, 7	2	1, 5	Update <i>State of the Mid-Atlantic Streams Report</i> with 1997-1998 data	2002	Lead: EPA/ORD/CBAT Partners: EPA/Region 3/WPD; MD

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											DNR; PA DEQ; DNREC; WV DEP
CBAT Lead: T. Pheiffer/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.3: <i>State of the Mid-Atlantic Groundwater Report</i>											
Task	Assessment Framework Levels					GP RA	R e g i o n	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.3.1	–					2, 8	4	1, 4	Complete Planning Phase for Groundwater Report <ul style="list-style-type: none"> <li>• develop partnerships</li> <li>• formulate assessment questions</li> <li>• identify all existing data sets</li> <li>• analyze existing data</li> <li>• identify data gaps</li> <li>• develop a modeling approach to predict susceptibility in areas with data gaps</li> </ul>	1999	Lead: EPA/ORD/NRMRL/SPRD Partners: EPA/ORD/NHEERL; USGS, EPA/Region 3, MDGS; DEGS
1.1.3.2	–					2	4	1, 4	Collect Groundwater Monitoring Data (Synoptic Survey of the Mid-Atlantic Coastal Plain)	2000-2001	Lead: EPA/ORD/NRMRL/SPRD Partners: EPA/ORD/CBAT; USGS; MDGS; DEGS; EPA/ORD/NHEERL/ETD
1.1.3.3	✓					2, 8	4	1, 4	Address technical issues related to GW <ul style="list-style-type: none"> <li>• How does GW input to surface water?</li> <li>• Is GW source of surface water problems?</li> <li>• GW connection to Best Mgt practices (relationship of restoration techniques in riparian corridor to GW quality)</li> <li>• Region-wide assessment of radium/radon in GW</li> </ul>	2002	Lead: EPA/ORD/NRMRL/SPRD Partners: EPA/ORD/CBAT; USGS; MDGS; DEGS
1.1.3.4	✓	✓				2, 7	4	1, 4, 5	Complete final report for region-wide Groundwater field program <ul style="list-style-type: none"> <li>• determine effective indicators</li> <li>• assess aquifer with site-specific data</li> </ul>	2003	Lead: EPA/ORD/NRMRL/SPRD Partners: EPA/ORD/NHEERL; USGS; MDGS ; DEGS; EPA/ Region 3

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									<ul style="list-style-type: none"> <li>characterize existing condition</li> <li>base-flow studies with NAQWA</li> <li>Chester River GW process and flow studies</li> <li>By 1999, complete planning phase</li> <li>By 2000-2001, collect field data</li> </ul>		
CBAT Lead: T. Pfeiffer/ORD											

Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.4: <i>State of the Mid-Atlantic Lakes, Ponds, and Reservoirs Report</i> - Fish Tissue Toxicity											
Task	Assessment Framework Levels					GP RA	R e g i o n	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.4.1	✓					2, 8	2	1, 4	Complete Planning Phase for Lakes, Ponds & Reservoirs <ul style="list-style-type: none"> <li>develop partnerships</li> <li>formulate assessment questions</li> <li>identify all existing data sets for fish</li> <li>analyze existing data</li> <li>identify data gaps</li> <li>review various indices and initiate new approaches as needed</li> <li>develop monitoring design</li> </ul>	1999	Co-Leads: EPA/OW and EPA/ORD/NHEERL/WED Partners: EPA/Region 3; MD DNR; PA DEQ; DNREC; WV DEP; VA DEQ
1.1.4.2	—					2	2	1, 4	Collect lakes, ponds and reservoir monitoring data	1999-2000	Co-Leads: EPA/OW and EPA/ORD/NHEERL/WED Partners: EPA/Region 3; MD DNR; PA DEQ; DNREC; WV DEP; VA DEQ
									Address Technical Issues Related to Lakes, Ponds and		Co-Leads: EPA/OW and

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1.1.4.3	✓					2, 8	2	1, 4	Reservoirs	2002	EPA/ORD/NHEERL/WED Partners: EPA/Region 3; MD DNR; PA DEQ; DNREC; WV DEP; VA DEQ
1.1.4.4	–	–				2, 7	2	1, 4, 5	<i>Complete State of the Mid-Atlantic Lakes, Ponds, and Reservoirs Report - Fish Tissue Toxicity</i>	2003	Co-Leads: EPA/OW and EPA/ORD/NHEERL/WED Partners: EPA/Region 3; MD DNR; PA DEQ; DNREC; WV DEP; VA DEQ
CBAT Lead: T. Pheiffer/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on Mid-Atlantic Resources											
Sub-Objective 1.5: <i>State of the Mid-Atlantic Wetlands Report</i>											
Task	Assessment Framework					GP RA	Regi on	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.5.1	✓					2, 7	1	1, 4, 5	Prepare <i>Estuarine/Coastal Wetlands Trends Report</i> <ul style="list-style-type: none"> <li>• develop partnerships</li> <li>• formulate assessment questions</li> <li>• identify all existing data sets</li> <li>• analyze existing data</li> <li>• identify data gaps</li> </ul>	1998/1999	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region3; USGS; EPA/ORD/NHEERL/AED & MED
1.1.5.2	✓					2, 7	2	1, 4, 5	Prepare <i>Freshwater Wetlands Trends Report</i> <ul style="list-style-type: none"> <li>• develop partnerships</li> <li>• formulate assessment questions</li> <li>• identify all existing data sets</li> <li>• analyze existing data</li> <li>• identify data gaps</li> </ul>	1998/1999	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region 3; USGS; EPA/ORD/NHEERL/AED & MED
1.1.5.3	✓					2, 8	1, 2	1, 4	Pilot monitoring program to identify quantity/quality of 2 selected wetlands <ul style="list-style-type: none"> <li>• develop monitoring design</li> <li>• collect monitoring data</li> <li>• determine is region-wide study is needed, or develop a modeling approach to predict susceptibility in areas with data gaps</li> </ul>	1999	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region 3; USGS; EPA/ORD/NHEERL/AED & MED
1.1.5.4	–					2	1, 2	1, 4	Collect Region-wide wetlands monitoring data (if needed)	2003	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region 3; EPA/ORD/NHEERL/AED & MED; PA DEQ; DNREC; MD DNR
1.1.5.5	–					2, 8	1, 2	1, 4	Address technical issues related to wetlands <ul style="list-style-type: none"> <li>• How do you define quality of wetlands?</li> <li>• How do you use remote sensing in an effective way?</li> </ul>	2004	Lead: EPA/ORD/NHEERL/WED Partners: EPA/ORD/NHEERL/AED & MED
1.1.5.6	–					2, 7	1, 2	1, 4, 5	Complete <i>State of the Mid-Atlantic Wetlands Report</i>	2005	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region 3; EPA/ORD/NHEERL/AED & MED; PA DEQ; DNREC; MD DNR
1.1.5.7	✓					2, 8	1, 2	1, 4	Generate Regional design applicability	2005	Lead: EPA/ORD/NHEERL/WED Partners: EPA/Region 3; USGS; EPA/ORD/NHEERL/AED & MED; PA

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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.6: <i>State of the Mid-Atlantic Forests Report</i>											
Task	Assessment Framework Levels					GP RA	Regi on	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.6.1	✓	✓				4, 7	2, 3, 5	1, 4, 5	Complete ecological assessment report of MAIA forests	1998	Lead: Forest Service Partners: NCSU; EPA/ORD/CBAT
1.1.6.2	–	–				4, 7	2, 3, 5	1, 4, 5	Complete socio-economic assessment report of MAIA forests	1998	Lead: Forest Service Partners: NCSU; EPA/ORD/CBAT
1.1.6.3	–	–				4, 7	2, 3, 5	1, 4, 5	Finalize <i>State of the Mid-Atlantic Forests Report</i> <ul style="list-style-type: none"> <li>• develop partnerships</li> <li>• formulate assessment questions</li> <li>• identify all existing data sets</li> <li>• analyze existing data, including ecological assessment and socio-economic assessment data</li> <li>• identify data gaps</li> <li>• review various indices and initiate new approaches as needed</li> <li>• develop monitoring design</li> </ul>	1999-2000	Lead: Forest Service Partners: NCSU; EPA/ORD/CBAT; EPA/ORD/NERL
1.1.6.4	–	–				4, 8	2, 3, 5	1, 4	Address technical issues related to forest health <ul style="list-style-type: none"> <li>• consistent monitoring</li> <li>• ozone - forest connection</li> </ul>	2002	Lead: Forest Service Partners: NCSU; EPA/ORD/CBAT
CBAT Lead: R. Landy/ORD											



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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.7: <i>State of the Mid-Atlantic Agriculture</i>											
Task	Assessment Framework Levels					GP RA	Reg ion	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.7.1	✓					4, 7	2, 3,	1, 4, 5	Complete <i>Profile of Agriculture in Maryland and Delaware Report</i>	1998	Lead: MD Ag Statistics Service Partners: EPA/ORD/CBAT
1.1.7.2	–					4, 8	2, 3	1, 4	Complete <i>A Conceptual Framework and Indicators for Assessing the Ecological Condition of Agricultural Lands</i>	1998	Lead: USDA/ARS Partners: NCSU; USDA/NRCS
1.1.7.3	–					4, 8	2, 3	1, 4	Complete <i>Sampling Agricultural Lands in the Environmental Monitoring and Assessment Program</i>	1998	Lead: NCSU Partners: USDA/ARS
1.1.7.4	–					4, 8	2, 3	1, 4, 5	Complete <i>Assessment of the Condition of Agricultural Lands in Six Mid-Atlantic States</i>	1998	Lead: USDA/ARS Partners: NCSU; USDA/NRCS
1.1.7.5	–					4, 8	2, 3	1, 4	Complete <i>Using Ant Species as a Biological Indicator of Agroecosystem Condition</i>	1998	Lead: USDA/ARS Partners: NCSU; USDA/NRCS
1.1.7.6	–					4, 7	2, 3	1, 4, 5	Complete Public-use Data-base of MAIA Agricultural Data	1998	Lead: USDA/ARS Partners: USDA/NRCS; NCSU; EPA/ORD/NHEERL/AED
1.1.7.7	–					4, 8	2, 3	1, 4	Address Technical Issues Related to Agricultural Lands Health	2001	Lead: EPA/ORD/CBAT Partners: USDA, State Ag and Forest Agencies; EPA/Region 3/WD
1.1.7.8	–					4, 7	2, 3	1, 4, 5	Finalize <i>State of the Mid-Atlantic Agriculture Report</i> <ul style="list-style-type: none"> <li>develop partnerships</li> <li>analyze existing data, including Maryland/Delaware and EMAP data</li> </ul>	2001-2002	Lead: EPA/ORD/CBAT Partners: USDA, States - ?, EPA/Region 3
CBAT Lead: P. Gant & R. Kutz/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.8: <i>State of the Mid-Atlantic Air Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.8.1	–					1, 8	1, 2, 3, 4	1, 4	Complete Planning Phase <ul style="list-style-type: none"> <li>• identify key players and opportunities</li> <li>• develop partnerships</li> <li>• formulate assessment questions</li> <li>• identify all existing data sets</li> <li>• analyze existing data</li> <li>• identify data gaps</li> <li>• review various indices and initiate new approaches as needed</li> <li>• develop monitoring design</li> </ul>	2003	Lead: EPA/ORD/CBAT Partners: EPA/Region 3; NOAA; EPA/Region 3/AD; EPA/Region 3/ESD
1.1.8.2	–					1	1, 2, 3, 4	1, 4	Collect monitoring data, if needed	TBD	Co-Leads: EPA/ORD/NERL and EPA/ORD/NHEERL/WED Partners: EPA/Region 3; NOAA
1.1.8.3	–					1, 8	1, 2, 3, 4	1, 4	Address Technical Issues Related to Air <ul style="list-style-type: none"> <li>• Air and Human Health Relationship</li> <li>• Acid deposition</li> </ul>	2004	Lead: Partners:
1.1.8.4	–					1, 7	1, 2, 3, 4	1, 4, 5	Complete State of the Mid-Atlantic Air Report <ul style="list-style-type: none"> <li>• 1<sup>st</sup> of periodic reports to replace current Agency-required reports</li> </ul>	2005	Lead: EPA/ORD/? Partners: EPA/Region3; NOAA
CBAT Lead: ?											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources											
Sub-Objective 1.9: <i>State of the Wildlife in the Mid-Atlantic Region Report</i>											
Task	Assessment Framework Levels					GP RA	Regio n	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.1.9.1			–			4, 8	1, 2, 5	1, 4, 5	Complete <i>Songbird Communities Indicate Ecological Condition of the Central Appalachians</i>	1998	Lead: Penn State Partners: EPA/ORD/NHEERL
1.1.9.2	–					4, 7	1, 2, 5	1, 4, 5	Complete database on Amphibian Monitoring in the Mid-Atlantic	1998-1999	Lead: USGS/BRD Partners: EPA/ORD/CBAT; NPS
1.1.9.3	–		–			4, 8	1, 2, 5	1, 4, 5	Complete Report on Response of Amphibian Communities to Stressors and Their Preference for Certain Landscapes and Vegetation Types	1999	Lead: EPA/Region 3/CBAT Partners: EPA/ORD/CBAT; NPS
1.1.9.4	✓					4, 7	1, 2, 5	1, 4, 5	Obtain data on threatened and endangered species (T&ES) for Mid-Atlantic Region (CRADA) <ul style="list-style-type: none"> <li>provide data in consistent computerized system and make accessible</li> </ul>	1998/1999	Lead: EPA/Region 3/CBAT Partners: FIFRA Task Force; EPA/OPP; EPA/OIRM; TNC; Association for Biodiversity Information
1.1.9.5					–	4, 7	1, 2, 5	1, 4, 5	Development and Evaluation of a Volunteer terrestrial Biota Monitoring Program for the mid-Atlantic	1999	Lead: EPA/Region 3/CBAT Partners: FIFRA Task Force; EPA/OPP; EPA/OIRM; TNC; Association for Biodiversity Information
1.1.9.6	✓					4, 7	1, 2, 5	1, 4, 5	Link T&ES with Fish & Wildlife and other wildlife/biological information systems	2000/2001	Lead: Partners: EPA/ORD/?
1.1.9.7	–		–			4, 7	1, 2, 5	1, 4, 5	Complete <i>State of the Wildlife in the Mid-Atlantic Region Report</i> (birds, amphibians, invertebrates, threatened and endangered species)	2002	Lead: EPA/ORD/? Partners: EPA Region 3; States - ?; Universities (name them)
1.1.9.8	–					4, 8	1, 2, 5	1, 4	Address Technical Issues Related to Wildlife	2003	Lead: Partners: EPA/ORD/?; EPA/ Region 3, States - ?, Universities (name

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												them)
CBAT Lead: R. Landy/ORD												

Goal 1: Integrated Assessment of Environmental Data												
Objective 1: Produce Individual Ecological Condition Reports on the Mid-Atlantic Resources												
Sub-Objective 1.10: <i>Mid-Atlantic Landscape Atlas</i>												
Task	Assessment Framework Levels					GP RA	Regio n	ORD	Task Description	Completion Date	Resources	
	1	2	3	4	M							
1.1.10.1	–					4, 8	1, 3, 4	1, 4	Conduct Accuracy Assessment of land Cover Classes and Selected Landscape Indicators	2000	Lead: EPA/ORD/NERL/? Partners:	
1.1.10.2	–					4, 8	1, 3, 4	1, 4	Update MRLC database by completing another round of satellite interpretation	2002	Lead: EPA/ORD/NERL/? Partners:	
1.1.10.3	–					4, 8	1, 3, 4	1, 4	Address Technical Issues Related to Landscape <ul style="list-style-type: none"><li>address scale and confidence issues (HUC 14 level, etc.)</li><li>test landscape indicators</li></ul>	2003	EPA/ORD/NERL/? Partners: EPA Region 3	
1.1.10.4	✓					4, 7	1, 3, 4	1, 4, 5	Update Landscape Atlas with new information	2005	Lead: EPA/ORD/NERL/? Partners: EPA Region 3	
CBAT Lead:        R. Kutz/ORD												

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.1: <i>Integrated Environmental Assessment for Mid-Atlantic Estuaries Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.1.1	–	–	✓			2, 8	1, 3, 4	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine estuarine and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to estuarine condition</li> <li>jointly review published literature, including <i>Condition of the Mid-Atlantic Estuaries Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2000	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NHEERL/AED; EPA/ORD/NERL; EPA/Region 3; NOAA; DOI/NPS; Delaware NEP; MD Coastal Bays NEP; CBP; MD DNR; DNREC, VA DEQ; EPA/ORD/NHEERL/GED
1.2.1.2	–	–	–			2, 7	1, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Estuaries Report</i>	2002	Lead: EPA/ORD/NHEERL/AED Partners: EPA/ORD/NERL; EPA/Region 3; NOAA; DOI/NPS; Delaware NEP; MD Coastal Bays NEP; CBP; MD DNR; DNREC, VA DEQ; EPA/ORD/NHEERL/GED
1.2.1.3	–	–	–			2, 7	1	1, 3, 5	Issue Periodic Updates of <i>Integrated Environmental Assessment for Mid-Atlantic Estuaries Report</i> to replace current Agency-required reports (303d and 305b)	2005	Lead: EPA/ORD/NHEERL/AED Partners: EPA/ORD/NERL; EPA/Region 3; NOAA; DOI/NPS; Delaware NEP; MD Coastal Bays NEP; CBP; MD DNR; DNREC, VA DEQ; EPA/ORD/NHEERL/GED
CBAT Lead: R. Kutz/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.2: <i>Integrated Environmental Assessment for Mid-Atlantic Streams Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.2.1	–	–	✓			2, 8	1, 2, 3, 4	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine streams and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to stream condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Streams Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2001	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NHEERL/WED; EPA/ORD/NERL; EPA/Region 3/WRD; MD DNR; PA DEQ; DNREC; WV DEP
1.2.2.2	–	–	–			2, 7	1, 2, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Streams Report</i>	2003	Lead: EPA/ORD/NHEERL/WED Partners: EPA/ORD/NERL; EPA/Region 3/WRD; MD DNR; PA DEQ; DNREC; WV DEP
1.2.2.3	–	✓	–			2, 7	2	1, 3, 5	Issue Periodic Updates of <i>Integrated Environmental Assessment for Mid-Atlantic Streams Report</i> to replace current Agency-required Reports (303d and 305b)	2005	Lead: EPA/ORD/NHEERL/WED Partners: EPA/ORD/NERL; EPA/Region 3/WRD; MD DNR; PA DEQ; DNREC; WV DEP
CBAT Lead: T. Pfeiffer/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.3: <i>Integrated Environmental Assessment for Mid-Atlantic Groundwater Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.3.1	–	–	✓			2, 8	1, 3, 4	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine groundwater and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to groundwater condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Groundwater Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2004	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NERL; EPA/ORD/NHEERL; USGS
1.2.3.2	–	–	–			2, 7	1, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Groundwater Report</i>	2006	Lead: EPA/ORD/NERL Partners: EPA/ORD/NHEERL; USGS
1.2.3.3	✓	–	–			2, 7	4	1, 3, 5	Issue <i>periodic updates to Integrated Environmental Assessment for Mid-Atlantic Groundwater Report</i> to replace current Agency-required Reports (303d and 305b)	2010	Lead: EPA/ORD/NERL Partners: EPA/ORD/NHEERL; USGS
CBAT Lead: T. Pheiffer/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.4: <i>Integrated Environmental Assessment for Mid-Atlantic Lakes, Ponds and Reservoirs Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.4.1	–	–	✓			2, 8	1, 2, 3, 4	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine lakes, ponds and reservoirs team with landscape assessment team (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to lakes, ponds and reservoir condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Lakes, Ponds and Reservoirs Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2006	Lead: EPA/ORD/CBAT Partners:
1.2.4.2	–	–	–			2, 7	1, 2, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Lakes, Ponds and Reservoirs Report</i>	2008	Lead: EPA/ORD/CBAT Partners:
1.2.4.3	–	–	–			4, 7	2, 3, 5	1, 4, 5	Issue Periodic Updates of the <i>Integrated Environmental Assessment for Mid-Atlantic Lakes, Ponds and Reservoirs Report</i> to replace current Agency-required reports	2010	Lead: EPA/ORD/CBAT Partners:
CBAT Lead: T. Pheiffer/ORD											



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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.5: <i>Integrated Environmental Assessment for Mid-Atlantic Wetlands Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.5.1	–	–	✓			2, 8	1, 2, 3, 4	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine wetlands and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to wetland condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Wetlands Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2006	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NHEERL/WED; EPA/ORD/NERL; EPA/Region 3; DNREC; MD DNR
1.2.5.2	–	–	–			2, 7	1, 2, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Wetlands Report</i>	2008	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NHEERL/WED; EPA/ORD/NERL; EPA/Region 3; DNREC; MD DNR
1.2.5.3	–	–	–			4, 7	2, 3, 5	1, 4, 5	Issue Periodic Updates of the <i>Integrated Environmental Assessment for Mid-Atlantic Wetlands Report</i> to replace current Agency-required reports	2010	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NHEERL/WED; EPA/ORD/NERL; EPA/Region 3; DNREC; MD DNR
CBAT Lead: P. Gant/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.6: <i>Integrated Environmental Assessment for Mid-Atlantic Forests</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.6.1	–	–	✓			4, 8	1, 2, 3, 4, 5	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine forest and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to forest condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Forests Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2001	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NERL; USDA/FS; EPA/Region 3
1.2.6.2	–	–	–			4, 7	1, 2, 3, 4, 5	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Forests Report</i>	2003	Lead: Forest Service Partners: EPA/ORD/CBAT; EPA/ORD/NERL; EPA/Region 3
1.2.6.3	–	–	–			4, 7	2, 3, 5	1, 4, 5	Issue Periodic Updates of the <i>State of the Mid-Atlantic Forests Report</i> to replace current Agency-required reports	2005	Lead: Forest Service Partners: EPA/ORD/CBAT; EPA/ORD/NERL; EPA/Region 3
CBAT Lead: R. Landy/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.7: <i>Integrated Assessment for Mid-Atlantic Agriculture Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.7.1	–	–	✓			4, 8	1, 2, 3, 4	1,4	Complete planning process <ul style="list-style-type: none"> <li>combine agriculture and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to agriculture condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Agriculture Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2003	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NERL; EPA/Region 3; USDA/ARS; USDA/NRCS; State Ag services
1.2.7.2	–	–	✓			4, 7	1, 2, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Agriculture Report</i>	2005	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NERL; EPA/Region 3; USDA/ARS; USDA/NRCS; State Ag services
1.2.7.3	–	–	–			4, 7	2, 3	1, 4, 5	Issue Periodic Updates of the <i>Integrated Environmental Assessment for Mid-Atlantic Agriculture Report</i>	2010	Lead: EPA/ORD/CBAT Partners: EPA/ORD/NERL; EPA/Region 3; USDA/ARS; USDA/NRCS; State Ag services
CBAT Lead: R. Kutz											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.8: <i>Integrated Environmental Assessment for Mid-Atlantic Air Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.8.1	–	–	✓			4, 8	1, 3, 4	1, 4	Complete planning process <ul style="list-style-type: none"> <li>combine air and landscape assessment teams (partnerships)</li> <li>formulate assessment questions which relate landscape/land-use to air condition</li> <li>jointly review published literature, including <i>State of the Mid-Atlantic Air Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>identify all applicable data sets</li> <li>analyze data</li> </ul>	2004	Lead: Partners:
1.2.8.2	–	–	✓			4, 7	1, 3, 4	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Air Report</i>	2006	Lead: Partners:
1.2.8.3	–	–	–			4, 7	1, 3, 4	1, 4, 5	Issue Periodic Updates of the <i>Integrated Environmental Assessment for Mid-Atlantic Air Report</i>	2010	Lead: Partners;
CBAT Lead:											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 2: Integrate Individual Environmental Assessments for Determining Cumulative-Impacts											
Sub-Objective 2.9: <i>Integrated Environmental Assessment for Mid-Atlantic Wildlife Report</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.2.9.1	–	–	✓			4, 8	1, 2, 3, 4, 5	1, 4	Complete planning process <ul style="list-style-type: none"> <li>• combine wildlife and landscape assessment teams (partnerships)</li> <li>• formulate assessment questions which relate landscape/land-use to wildlife condition</li> <li>• jointly review published literature, including <i>State of the Mid-Atlantic Wildlife Report</i> and <i>Mid-Atlantic Landscape Atlas</i></li> <li>• identify all applicable data sets</li> <li>• analyze data</li> </ul>		Lead: Partners:
1.2.9.2	–	–	✓			4, 7	1, 2, 3, 4, 5	1, 4, 5	Complete <i>Integrated Environmental Assessment for Mid-Atlantic Wildlife Report</i>	2005	Lead: Partners:
1.2.9.3	–	–	–			4, 7	1, 2, 5	1, 4, 5	Issue Periodic Updates of the <i>Integrated Environmental Assessment for Mid-Atlantic Wildlife Report</i> to Replace Current Agency-required Reports	2010	Lead: EPA/ORD/? Partners: EPA/Region 3; States - ?
CBAT Lead: R. Landy/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 3: Develop and Support Themes Using Integrated Assessments of Environmental Data											
Sub-Objective 3.1: <i>Integrated Assessment for Ecology/Human Health Relationship in the Mid-Atlantic</i>											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.3.1.1				✓		4, 8	1, 4	1, 2, 4	Complete planning process <ul style="list-style-type: none"> <li>develop partnerships</li> <li>formulate assessment questions</li> <li>identify all existing data sets</li> <li>analyze existing data</li> <li>identify data gaps</li> </ul>	2004	Lead: Partners:
1.3.1.2				—		4, 7	1, 4	1, 2, 4, 5	Complete <i>Integrated Assessment for Ecology/Human Health Relationship in the Mid-Atlantic</i>	2006	Lead: Partners:
CBAT Lead: R. Kutz/ORD											

NOTES - Global Climate? Biodiversity? Other themes?  
1995 Rare Project?

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Goal 1: Integrated Assessment of Environmental Data											
Objective 3: Develop and Support Themes Using Integrated Assessments of Environmental Data											
Sub-Objective 3.2: <i>Integrated Assessment for Mid-Atlantic Urban Communities</i>											
Task	Assessment Framework Levels					GP RA	R e g i o n	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.3.2.1				✓		4, 8	4	1, 2, 4	Complete planning process <ul style="list-style-type: none"> <li>develop partnerships (ties multiple resources together in an urban setting)</li> <li>formulate assessment questions</li> <li>identify all existing data sets</li> <li>analyze existing data</li> <li>identify data gaps</li> <li>review various indices and initiate new approaches as needed</li> </ul>	1999	Lead: Partners:
1.3.2.2				–		4, 8	4	1, 2, 4	Collect monitoring data (if appropriate)	2000-2001	Lead: Partners:
1.3.2.3				–		4, 7	4	1, 2, 4, 5	Complete <i>Integrated Assessment for Mid-Atlantic Urban Communities Report</i>	2003	Lead: Partners:
CBAT Lead:											

NOTES - various scales: Baltimore LTER; MAIA  
Socio-economics

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Goal 1: Integrated Assessment of Environmental Data											
Objective 3: Develop and Support Themes Using Integrated Assessments of Environmental Data											
Sub-Objective 3.3: Regional <i>Vulnerability Assessment (REVA)</i>											
Task	Assessment Framework Levels					GPRA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.3.3.1				✓		1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Complete planning process	1998	Lead: EPA/ORD/NERL Partners:
1.3.3.2				–		1,2,4,8	1,2,3,4,5	1,2,4	Produce Stressor Atlas	1999	Lead: EPA/ORD/NERL Partners:
1.3.3.3				–		1,2,4,8	1,2,3,4,5	1,2,4	Develop next generation of models	2008	Lead: EPA/ORD/NERL Partners:
1.1.8.1	–					1, 8	1, 2, 3, 4	1, 4	Advance State-of-the-Art for Air Modeling	2001	Lead: EPA/ORD/? Partners:
CBAT Lead: R. Kutz/ORD											



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Goal 1: Integrated Assessment of Environmental Data											
Objective 3: Develop and Support Themes Using Integrated Assessments of Environmental Data											
Sub-Objective 3.4: Multi-Media Integrated modeling System (MIMS)											
Task	Assessment Framework Levels					GPRA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.3.4.1					–	1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Assessment of State-of-the-art Modeling in CBP <ul style="list-style-type: none"> <li>individual resources (water, land, air)</li> <li>how to enhance</li> </ul>		
1.3.4.2					–	1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Develop a long-range plan - multi-media on one system		
1.3.4.3					–	1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Complete state-of-the-art models by individual resource	1998	Lead: EPA/ORD/NERL Partners: CBP
1.1.1.4					–	2, 8	1	1, 4	Provide advanced Estuarine Modeling	2005	Lead: EPA/ORD/? Partners: CBP; EPA/Region 3
CBAT Lead: R. Kutz/ORD											

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Goal 1: Integrated Assessment of Environmental Data											
Objective 3: Develop and Support Themes Using Integrated Assessments of Environmental Data											
Sub-Objective 3.5: <i>Encyclopedic Report on the Environmental Condition of the Mid-Atlantic</i> Table of Contents could include: <ul style="list-style-type: none"> <li>• State of the Ecosystem for the Mid-Atlantic</li> <li>• Stressors (causes, land-use implications, pollutants)</li> <li>• Socio-Economic Factors</li> <li>• Current and Project Biodiversity Condition</li> <li>• Regional-Scale Vulnerability Assessment</li> <li>• Sustainability</li> </ul>											
Task	Assessment Framework Levels					GPRA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
1.3.5.1				✓		1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Complete planning process <ul style="list-style-type: none"> <li>• develop partnerships</li> <li>• formulate assessment questions</li> <li>• identify available information for report</li> <li>• determine possibility of generating report with available information</li> </ul>	2002	Lead: Partners:
1.3.5.2				–		1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Complete <i>Encyclopedic Report on the Environmental Condition of the Mid-Atlantic</i>	2006	Lead: Partners:
1.3.5.3				–		1, 2, 4, 8	1, 2, 3, 4, 5	1, 2, 4	Issue Periodic Updates of the <i>Encyclopedic Report on the Environmental Condition of the Mid-Atlantic</i>	2010	Lead: Partners:
CBAT Lead: P. Gant/ORD											

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Goal 2: Integrated Monitoring											
Objective 1: Inventory Monitoring Programs											
Sub-Objective 1.1: <i>Geo-referenced Web-based inventory of Mid-Atlantic Environmental Monitoring Programs</i>											
Task	Assessment Framework Levels					G P R A	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.1.1.1					–	7	1, 2, 3	1, 4, 5	Identify federal monitoring programs <ul style="list-style-type: none"> <li>what is being monitored, where and why</li> <li>provide maps-on-demand capability</li> </ul>	1998	Lead: EPA/ORD/NHEERL Partners: USGS; NOAA
2.1.1.2					–	7	1, 2, 3	1, 4, 5	Identify state, local and NGO monitoring programs <ul style="list-style-type: none"> <li>what is being monitored, where and why</li> <li>provide maps-on-demand capability</li> </ul>	1999	Lead: EPA/ORD/NHEERL Partners:
CBAT Lead: P. Gant/ORD and L. Jackson/ORD											

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## Goal 2: Integrated Monitoring

### Objective 2: Evaluate Adequacy of Monitoring Network

#### Sub-Objective 2.1: *The Mid-Atlantic Integrated Assessment (MAIA) Atlas of Environmental Data Collection Programs and Sites*

Task	Assessment Framework Levels					G P R A	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.2.1.1					–	7	1, 2, 3	1, 4, 5	Determine Geographic Coverage of existing Federal Monitoring Programs <ul style="list-style-type: none"> <li>produce maps for each monitoring program</li> </ul>	1999	Lead: EPA/ORD/NHEERL Partners:
2.2.1.2					–	7	1, 2, 3	1,4, 5	Determine Geographic Coverage of existing State, Local, NGO and Academic Monitoring Programs <ul style="list-style-type: none"> <li>produce maps for each monitoring program</li> </ul>	2000	Lead: EPA/ORD/NHEERL Partners:

CBAT Lead: P. Gant/ORD

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Goal 2: Integrated Monitoring											
Objective 2: Evaluate Adequacy of Monitoring Network											
Sub-Objective 2.2: <i>Analysis of Mid-Atlantic Monitoring Networks</i>											
Task	Assessment Framework Levels					G P R A	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.2.2.1					–	7	1, 2, 3	1, 4, 5	Produce resource-specific maps showing geographic coverage for each resource	2000	Lead: EPA/ORD/NHEERL Partners:
2.2.2.2					–	8	1, 2, 3	1, 4	Determine Scale of each monitoring program <ul style="list-style-type: none"> <li>to what scale can the data from each program be used with n degree of confidence?</li> </ul>	2000	Lead: EPA/ORD/NHEERL Partners:
CBAT Lead: P. Gant/ORD											

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Goal 2: Integrated Monitoring											
Objective 3: Design Individual Resource Monitoring											
Sub-Objective 3.1: MAIA-wide Estuarine Monitoring											
Task	Assessment Framework Levels					GP RA	R e g i o n	OR D	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.3.1.1					–	2, 8	1	1, 4	Develop Assessment Questions <ul style="list-style-type: none"> <li>• region-wide</li> <li>• specific geographic sub-regions and/or site</li> <li>• special problems</li> <li>• compliance</li> </ul>	2000	Lead: EPA/ORD/NHEERL/GED Partners: EPA/ORD/NHEERL/AED; EPA Region 3; EPA Region 2; CBP; DRBC; EPA/OW; VA DEQ; NOAA; VIMS; MD DNR; DNREC; EPA/ORD/NHEERL/WED; UDEL; USGS; TNC; USDA/ARS; USF&WS; NPS/Assateague Island National Seashore
2.3.1.2					–	2, 8	1	1, 4	Determine Indicators (Core and New)	2001	Lead: EPA/ORD/NHEERL/GED Partners: EPA/ORD/NHEERL/AED; EPA Region 3; EPA Region 2; CBP; DRBC; EPA/OW; VA DEQ; NOAA; VIMS; MD DNR; DNREC; EPA/ORD/NHEERL/WED; UDEL; USGS; TNC; USDA/ARS; USF&WS; NPS/Assateague Island National Seashore
2.3.1.3					–	2, 8	1	1, 4	Design a monitoring program which incorporates probability-based and targeted sampling	2003	Lead: EPA/ORD/NHEERL/GED Partners: EPA/ORD/NHEERL/AED; EPA Region 3; EPA Region 2; CBP; DRBC; EPA/OW; VA DEQ; NOAA; VIMS; MD DNR; DNREC; EPA/ORD/NHEERL/WED; UDEL; USGS; TNC; USDA/ARS; USF&WS; NPS/Assateague Island

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											National Seashore
2.3.1.4					–	2, 10	1	1,4	Provide recommendation on Region-wide monitoring strategy for Estuaries <ul style="list-style-type: none"> <li>• new monitoring program serves as detailed guidance for reporting purposes (303d and 305b)</li> <li>• consistent across all states</li> <li>• incorporating biological and landscape analyses along with traditional chemical approach</li> </ul>	2003	Lead: EPA/ORD/NHEERL/GED Partners: EPA/ORD/NHEERL/AED; EPA Region 3; EPA Region 2; CBP; DRBC; EPA/OW; VA DEQ; NOAA; VIMS; MD DNR; DNREC; EPA/ORD/NHEERL/WED; UDEL; USGS; TNC; USDA/ARS; USF&WS; NPS/Assateague Island National Seashore
CBAT Lead: R. Kutz/ ORD											

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Goal 2: Integrated Monitoring											
Objective 3: Design Individual Resource Monitoring											
Sub-Objective 3.2: MAIA-wide Stream Monitoring											
Task	Assessment Framework Levels					GP RA	R e g i o n	OR D	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.3.2.1					–	2, 8	2	1, 4	Develop Assessment Questions <ul style="list-style-type: none"> <li>region-wide</li> <li>specific geographic sub-regions and/or site</li> <li>special problems</li> <li>compliance</li> </ul>	2000	Lead: Partners:
2.3.2.2					–	2, 8	2	1, 4	Determine Indicators (Core and New)	2001	Lead: Partners:
2.3.2.3					–	2, 8	2	1, 4	Design a monitoring program which incorporates probability-based and targeted sampling	2003	Lead: Partners:
2.3.2.4					–	2, 10	2	1, 4	Provide recommendation on Region-wide monitoring strategy for Estuaries <ul style="list-style-type: none"> <li>new monitoring program serves as detailed guidance for reporting purposes (303d and 305b)</li> <li>consistent across all states</li> <li>incorporating biological and landscape analyses along with traditional chemical approach</li> </ul>	2003	Lead: Partners:
CBAT Lead: T. Pheiffer/ORD											



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Goal 2: Integrated Monitoring

Objective 3: Design Individual Resource Monitoring

Sub-Objective 3.3: Planning Process for MAIA-wide Monitoring in Other Resources

Task	Assessment Framework Levels					G P R A	Regio n	OR D	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.3.3.1					—	4	3, 4, 5	1, 4	Establish partnerships and identify regulatory processes which would be impacted by new monitoring designs	2003	Lead: Partners:
CBAT Lead:											

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## Goal 2: Integrated Monitoring

### Objective 4: Design Integrated (Multiple Resource) Monitoring

#### Sub-Objective 4.1: Integrated Estuarine and Stream Monitoring

Task	Assessment Framework Levels					GP RA	Re gio n	OR D	Task Description	Completion Date	Resources
	1	2	3	4	M						
2.4.1.1					–	2, 8	1, 2	1, 4	Develop Assessment Questions <ul style="list-style-type: none"> <li>• region-wide</li> <li>• specific geographic sub-regions and/or sites</li> <li>• special problems</li> <li>• compliance</li> </ul>	2003	Lead: Partners:
2.4.1.2					–	2, 8	1, 2	1, 4	Determine indicators (core and new)	2004	Lead: Partners:
2.4.1.3					–	2, 8	1, 2	1, 4	Design a monitoring program which incorporates probability-based and targeted sampling	2004	Lead: Partners:
2.4.1.4					–	2, 10	1, 2	1, 4	Provide monitoring recommendation to Region <ul style="list-style-type: none"> <li>• new monitoring program serves as detailed guidance for reporting purposes (303d and 305b)</li> <li>• consistent across all states</li> </ul>	2005	Lead: Partners:

CBAT Lead:

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Goal 3: Environmental Restoration											
Objective 1: Develop Research Strategy											
Sub-Objective 1.1: <i>Eco-Restoration Research Strategy</i>											
Task	Assessment Framework Levels					GPRA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
3.1.1.1					–	4, 8	2	3	Complete strategic planning process for Eco-Restoration <ul style="list-style-type: none"> <li>Establish agreement with ORD</li> <li>Initiate Eco-System Design Team</li> <li>Develop Key Questions</li> </ul>	1998	Lead: EPA/ORD/NRMRL/SRD Partners: EPA/ORD/NERL/EERD; EPA/Region 3; CBP; DNREC; MD DNR; USFS; CVI; PA DEP; USDA/ARS; F&WS; EPA/ORD/NHEERL; ACOE; VA DOF; USGS; MD Dept. of Ag; USGS/BRD; MD FS; USDA/NRCS; ICPRB; MD ES; Smithsonian
3.1.1.2					–	4, 8	2	3	Evaluate Raskin Philosophy for restoration and application to strategy	1999	Lead: EPA/ORD/NRMRL/SRD Partners: EPA/ORD/NERL/EERD; EPA/Region 3; CBP; DNREC; MD DNR; USFS; CVI; PA DEP; USDA/ARS; F&WS; EPA/ORD/NHEERL; ACOE; VA DOF; USGS; MD Dept. of Ag; USGS/BRD; MD FS; USDA/NRCS; ICPRB; MD ES; Smithsonian
3.1.1.3					–	4, 8	2	3	Complete 3-4 demonstration projects	1999/2001	Lead: EPA/ORD/NRMRL/SRD Partners: EPA/ORD/NERL/EERD; EPA/Region 3; CBP; DNREC; MD DNR; USFS; CVI; PA DEP; USDA/ARS; F&WS; EPA/ORD/NHEERL; ACOE; VA DOF; USGS; MD Dept. of Ag; USGS/BRD; MD FS; USDA/NRCS;

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											ICPRB; MD ES; Smithsonian
3.1.1.4					–	4, 8, 10	2	3	Prepare Recommendation Report for future restoration projects in Region 3	2002–2003	Lead: EPA/ORD/NRMRL/SRD Partners: EPA/ORD/NERL/EERD; EPA/Region 3; CBP; DNREC; MD DNR; USFS; CVI; PA DEP; USDA/ARS; F&WS; EPA/ORD/NHEERL; ACOE; VA DOF; USGS; MD Dept. of Ag; USGS/BRD; MD FS; USDA/NRCS; ICPRB; MD ES; Smithsonian
CBAT Lead: R. Kutz/ORD											

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Goal 3: Environmental Restoration											
Objective 2: Inventory Eco-Restoration Projects in the Mid-Atlantic Region											
Sub-Objective 2.1: Survey Questionnaire and Database Design											
Task	Assessment Framework Levels					GP RA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
3.2.1.1		✓			–	4	2	3	Develop Planning Process <ul style="list-style-type: none"> <li>develop partnerships</li> <li>formulate survey questionnaire</li> <li>identify all existing eco-restoration projects</li> <li>design database as an enhancement to the <i>Geo-referenced Web-based Inventory of Mid-Atlantic Environmental Monitoring Programs</i></li> </ul>	1999	Lead: EPA/ORD/NRMRL Partners: EPA/ORD/CBAT
3.2.1.2					–	4, 7	2	3	Produce Draft Inventory of Eco-Restoration Projects in the mid-Atlantic <ul style="list-style-type: none"> <li>complete survey questionnaire for each eco-restoration project</li> <li>produce geo-referenced map of each project</li> </ul>	1999-2000	Lead: EPA/ORD/NRMRL Partners: EPA/ORD/CBAT
CBAT Lead: P. Gant/ORD											

# MAIA Operational Plan

version: October 13, 1998

Goal 3: Environmental Restoration											
Objective 3: Integrate Eco-Restoration with Landscape Atlas											
Sub-Objective 3.1: Incorporate Answers to Landscape Atlas											
Task	Assessment Framework Levels					GP RA	Region	ORD	Task Description	Completion Date	Resources
	1	2	3	4	M						
3.3.1.1					–	4, 8	1, 2, 3, 4	1, 3, 4	Complete Planning Process <ul style="list-style-type: none"> <li>Develop partnerships</li> <li>identify issues raised by Landscape Atlas which could be addressed through eco-restoration</li> <li>prioritize issues and geographic areas</li> </ul>	1999	Lead: EPA/ORD/NRMRL Partners:
CBAT Lead: R. Kutz/ORD											

# MAIA Operational Plan

version: October 13, 1998

Goal 4: Communication of Scientific Results											
Objective 1: Increase visibility and usability of products/reports											
Sub-Objective 1.1: Hold MAIA Working Conference											
Task	Assessment Framework Levels					GP RA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
4.1.1.1					–	7		5	Establish MAIA Working Conference Organizing Committee	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.1.2					–	7		5	Select venue for MAIA Working Conference	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.1.3					–	7		5	Complete planning process for MAIA Working Conference <ul style="list-style-type: none"> <li>Develop MAIA conference announcement flyer and call for posters and papers</li> <li>Develop conference materials package for attendees</li> <li>Write letters to speakers with meeting requirements</li> <li>Develop MAIA Working Conference Website</li> </ul>	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3; USGS; USFS; U of ME; MD DNR; EPA/ORD/NHEERL/AED
4.1.1.4					–	7		5	Hold MAIA Working Conference	November 30 - December 2, 1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.1.5					–	7, 10		5	Post Conference Activities <ul style="list-style-type: none"> <li>Collect manuscripts from the speakers</li> <li>Review feedback and incorporate into MAIA Program planning</li> </ul>	1998-1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											

# MAIA Operational Plan

version: October 13, 1998

Goal 4: Communication of Scientific Results											
Objective 1: Increase visibility and usability of products/reports											
Sub- Objective 1.2: Focus Groups											
Task	Assessment Framework Levels					GP RA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
4.1.2.1					–	7		5	Identify client types	1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.2.2					–	7		5	Form focus groups which represent each client type	1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.2.3					–	7		5	Select sample products for focus groups to evaluate3/provide feedback	1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.2.4					–	7		5	Hold focus groups	1999-2000	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.2.5					–	7, 10		5	Document feedback	2000	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											



# MAIA Operational Plan

version: October 13, 1998

Goal 4: Communication of Scientific Results											
Objective 1: Increase Visibility and usability of products/reports											
Sub- Objective 1.3: Feedback Assessment on MAIA Products											
Task	Assessment Framework Levels					GP RA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
4.1.3.1					–	7		5	Develop surveys	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.3.2					–	7		5	Develop tracking system to monitor feedback	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.3.3					–	7, 10		5	Assess feedback and implement changes as needed to future products	on-going	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											

NOTES: Tech Transfer Tool

# MAIA Operational Plan

version: October 13, 1998

Goal 4: Communication of Scientific Results											
Objective 1: Increase Visibility and usability of products/reports											
Sub- Objective 1.4: Implement Various Marketing Tools											
Task	Assessment Framework Levels					GP RA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
4.1.4.1					–	7		5	Explore alternative marketing tools <ul style="list-style-type: none"> <li>generate list of marketing tools to increase visibility of MAIA products</li> <li>determine users of products</li> </ul>	1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.4.2					–	7		5	Implement marketing options	1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.1.4.3					–	7, 10		5	Assess success of various marketing tools	2000	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											

# MAIA Operational Plan

version: October 13, 1998

Goal 4: Communication of Scientific Results											
Objective 2: Improve the Quality and Accessibility of Environmental Data											
Sub- Objective 2.1: Develop Prototype MAIA Website											
Task	Assessment Framework Levels					G P R A	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
4.2.1.1					–	7		5	Hold meetings with Region 3 staff to determine user needs	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.2.1.2					–	7		5	Use rapid prototyping to develop a Website <ul style="list-style-type: none"> <li>• implement the approved strategic vision</li> <li>• reflect data that have been acquired and analyzed to date</li> <li>• provides some “place holders” for work yet to be done</li> </ul>	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.2.1.3					–	7		5	Develop a MAIA information Management Plan	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.2.1.4					–	7		5	Present the Website at the MAIA Working Conference	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
4.2.1.5					–	7		5	Document Feedback	1998	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											

# MAIA Operational Plan

version: October 13, 1998

Goal 4: Communication of Scientific Results

Objective 2: Improve the Quality and Accessibility of Environmental Data

Sub- Objective 2.2: Revise the MAIA Website

Task	Assessment Framework Levels					GP RA	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
4.2.2.1					—	7, 10		5	Hold a series of meetings with clients and change the website to meet their needs	ongoing	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											

# MAIA Operational Plan

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Goal 5: Use of Environmental Assessment in Decision Making											
Objective 1: Develop Decision-Making Model using Environmental Assessments											
Sub-Objective 1.1: Report - <i>How Can Use of improved Ecological Data Change Long-Range Reporting Systems?</i>											
Task	Assessment Framework Levels					G P R A	R e g i o n	O R D	Task Description	Completion Date	Resources
	1	2	3	4	M						
5.1.1.1					–	10		3	Complete planning process <ul style="list-style-type: none"> <li>establish partnerships with EPA and other Agency regulatory offices (e.g., Water, Air, Toxics, etc.)</li> <li>review existing regulations to identify opportunities for change (streamlining, better use of data and assessments)</li> <li>review published MAIA reports to identify possible new ways of doing business</li> </ul>	1999	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
5.1.1.2					–	10		3	Region 3 will serve as the demonstration of new reporting methods <ul style="list-style-type: none"> <li>pilot</li> <li>peer-review</li> <li>revised process (if necessary)</li> </ul>	2000	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
5.1.1.3					–	10		3	EPA and other Federal Agencies will institutionalize the new reporting methods nationally	2005	Lead: EPA/ORD/CBAT Partners: EPA/Region 3
CBAT Lead: P. Gant/ORD											

NOTES: CWA Plan  
TMDLs  
Nutrients  
Valley Fill